

Appl. No. 09/744,271  
Atty. Docket No. AA333  
Amdt. dated May 10, 2004  
Reply to Office Action of November 12, 2003  
Paper No. 15  
Customer No. 27752

## **REMARKS**

### **Application Amendments**

Claims 1-10 are pending in this application and all claims stand rejected. Claims 1 and 10 were previously amended in a Preliminary Amendment filed January 22, 2001. Claim 5 was previously amended in view of a statutory 35 U.S.C. 101 double patenting rejection. No new matter has been added.

### **Invention Synopsis**

The present invention is directed to a hair conditioning composition comprising: (1) a carboxylic acid/carboxylate copolymer; (2) an amphoteric conditioning polymer; and (3) an aqueous carrier. The compositions of the present invention provide hair conditioning compositions suitable for leave-on use which provide improved conditioning benefits to the hair such as smoothness, softness, and reduction of friction, are easy to apply on the hair, and leave the hair and hands with a clean feeling.

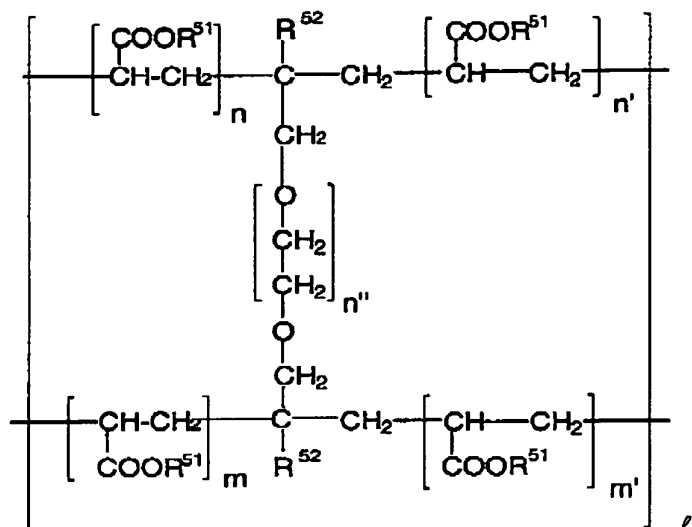
### **35 U.S.C. 112, First Paragraph Rejection**

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The Examiner has asserted that the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner asserts that Applicants disclose the polymer claimed in claim 1 (1) and the monomers from which it may be synthesized. However, the Examiner asserts that Applicants do not disclose how to make the polymers. That is, neither the catalyst nor experimental conditions such as solvents and temperature of reaction are disclosed, according to the Examiner. The Examiner further asserts that if the polymer is an item of commerce, it is unclear which of the tradenames disclosed corresponds to the claimed polymer. Applicants respectfully traverses this rejection.

Applicants believe that the present application contains sufficient and supported disclosure, with regard to the acrylic acid/alkyl acrylate copolymers claimed in claim 1 (1), for one of ordinary skill in the art to practice the invention. Applicants would first like to direct the Examiner's attention to page 4 line 15 to page 5 line 13 wherein the application states the following:

"Suitable carboxylic acid/carboxylate copolymers herein are acrylic acid/alkyl acrylate copolymers having the following formula:

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wherein  $R^{51}$ , independently, is a hydrogen or an alkyl of 1 to 30 carbons wherein at least one of  $R^{51}$  is a hydrogen.  $R^{52}$  is as defined above.  $n$ ,  $n'$ ,  $m$  and  $m'$  are integers in which  $n+n'+m+m'$  is from about 40 to about 100,  $n''$  is an integer of from 1 to about 30, and  $\ell$  is defined so that the copolymer has a molecular weight of about 500,000 to about 3,000,000.

Commercially available carboxylic acid/carboxyl ate copolymers useful herein include: CFTA name Acrylates/C10-30 Alkyl Acrylate Crosspolymer having tradenames Pemulen TR-1, Pemulen TR-2, Carbopol 1342, Carbopol 1382, and Carbopol ETD 2020, all available from B. F. Goodrich Company."

Applicants would like to state that the specification clearly defines that the carboxylic acid/carboxylate copolymer of claim 1 (1) is commercially available under the CFTA name Acrylates/C10-30 Alkyl Acrylate Crosspolymer having tradenames Pemulen TR-1, Pemulen TR-2, Carbopol 1342, Carbopol 1382, and Carbopol ETD 2020, all available from B. F. Goodrich Company. Applicants would also like to state that the Examples provide further support and enablement, by exemplifying PEMULEN TR-1 and PEMULEN TR-2 as acrylic acid/alkyl acrylate copolymers in the present invention.

According to the disclosure provided in the specification, the polymer is an item of commerce, for which all of the tradenames disclosed corresponds to the claimed polymer. Such would be readily understood to one of skill in the art. Further support is provided in the CFTA manual, for which Applicants have provided an attachment copy for the Examiner review (please see Attachment). In the CFTA manual, the polymer, as defined in claim 1 (1) may be an

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acrylate/C10-C30 alkyl acrylate crosspolymer and is commercially available under the tradenames Pemulen TR-1, Pemulen TR-2, Carbopol 1342, Carbopol 1382 and Carbopol ETD 2020, all available from Noveon (formerly from B.F. Goodrich). One of skill in the art would readily understand that selection of any of these provided acrylate acid/carboxylate copolymers, under the Acrylate/C10-C30 alkyl acrylate crosspolymer in the CFTA, would meet the Claim 1 (1) requirements.

Further support to one of skill in the art, with regard to enabling one of skill in the art to make and/or use the invention can be found in the Examples. Applicants would like to direct the Examiner's attention to Examples 1-6 and Examples 7-12, wherein examples are provided wherein the acrylic acid/alkyl acrylate copolymer is PEMULEN TR-1 and further examples are provided wherein the acrylic acid/alkyl acrylate copolymer is PEMULEN TR-2 (please see "Definition of Components" Footnote 1 and Footnote 2 on page 55).

Such examples provide adequate and clear support to one of skill in the art to further enable one to make and/or use the invention using the commercially available acrylic acid/alkyl acrylate copolymers, listed in the CFTA.

The Examples provide further support and enablement for each of the possible components of the composition, as listed on pages 55 and 56. Support and enablement for the method of preparation for the hair conditioning composition, per se, is found in the specification on page 57- lines 1-22, wherein experimental conditions are clearly defined, such as temperature.

Applicants believe, based on the remarks above, that the acrylic acid/alkyl acrylate copolymer of claim 1 (1) in the present invention is clearly described and supported in the specification, including the examples, in such a way as to enable one skilled in the art to make and/or use the invention. Applicants kindly request reconsideration.

#### Conclusions

Applicants have made an earnest effort to place their application in proper form and distinguish their claimed invention from the prior art which was applied in the November 12, 2003 Office Action. WHEREFORE, consideration of this application, withdrawal of the rejections under 35 U.S.C § 112, first paragraph and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,

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## Acrylat s/C10-30 Alkyl Acrylate Crosspolymer

- **INCI Name:** Acrylates/C10-30 Alkyl Acrylate Crosspolymer
- **CTFA Monograph Id:** 4663
- **Definition:** Acrylates/C10-30 Alkyl Acrylate Crosspolymer is a copolymer of C10-30 alkyl acrylate and one or more monomers of acrylic acid, methacrylic acid or one of their simple esters crosslinked with an allyl ether of sucrose or an allyl ether of pentaerythritol.
- **SAFETY/REGULATORY INFORMATION**
- **Chemical Class(es):** Synthetic Polymers (Including salts)
- **Function(s):** Emulsion Stabilizers; Viscosity Increasing Agents - Aqueous; Viscosity Increasing Agents - Nonaqueous
- **Reported Product Categories:** Aftershave Lotions; Baby Shampoos; Bath Capsules; Bath Oils, Tablets, and Salts; Bath Preparations, Misc.; Body and Hand Preparations (Excluding Shaving Preparations); Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Eye Makeup Removers; Eyeliners; Face and Neck Preparations (Excluding Shaving Preparations); Fragrance Preparations, Misc.; Hair Shampoos (Coloring); Indoor Tanning Preparations; Moisturizing Preparations; Perfumes; Personal Cleanliness Products, Misc.; Powders (Dusting and Talcum, Excluding Aftershave Talcs); Shampoos (Non-coloring); Skin Care Preparations, Misc.; Suntan Gels, Creams, and Liquids; Suntan Preparations, Misc.
- **Trade Name(s):**
  - Carbopol 1342(Noveon, Inc.)
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  - Carbopol ETD 2020(Noveon, Inc.)
  - Carbopol Ultrez 21(Noveon, Inc.)
  - Carbopol Ultrez 20 Polymer(Noveon, Inc.)
  - Pemulen TR-1(Noveon, Inc.)
  - Pemulen TR-2(Noveon, Inc.)
- **Trade Name Mixture(s):**
  - Catiosphere Color (Coletica, S.A.)
  - Champagne Complex (Greentech)
  - Champagne Truffle Complex (Greentech)
  - Greenosome Smart M (Greentech)
  - Happyness Complex I (Greentech)
  - Happyness Complex I (Greentech)
  - Ladensyl PA (Laboratoires Serobiologiques)
  - Magilyne (Greentech)
  - Nucleolys (Greentech)
  - Papaya Complex (Greentech)
  - Polyphenols de cacao (Greentech)
  - Pongamia Complex (Greentech)
  - Protelin L (Greentech)
  - Retimine II (Greentech)
  - Retimine III (Greentech)
  - Self Tanning Complex (Greentech)
  - The Vert Encapsule (Greentech)
- **Translations:**
  - Spanish Translation: Cospolmero de acrilatos/C10-30 alquil acrilato
- **CTFA International Buyers' Guide**

*Questions/comments/concerns? E-mail the Science Department*